

100

FIG. 1

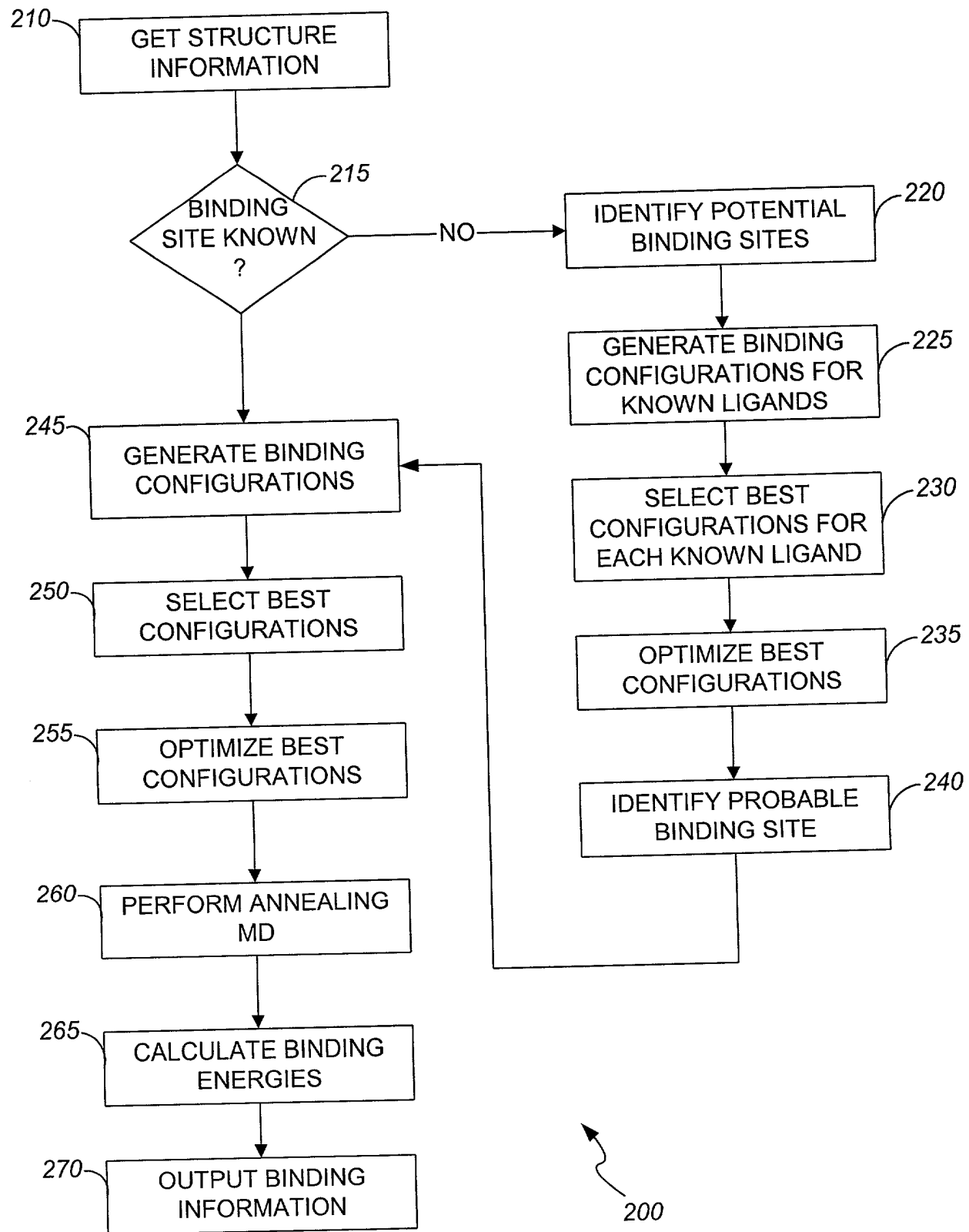


FIG. 2

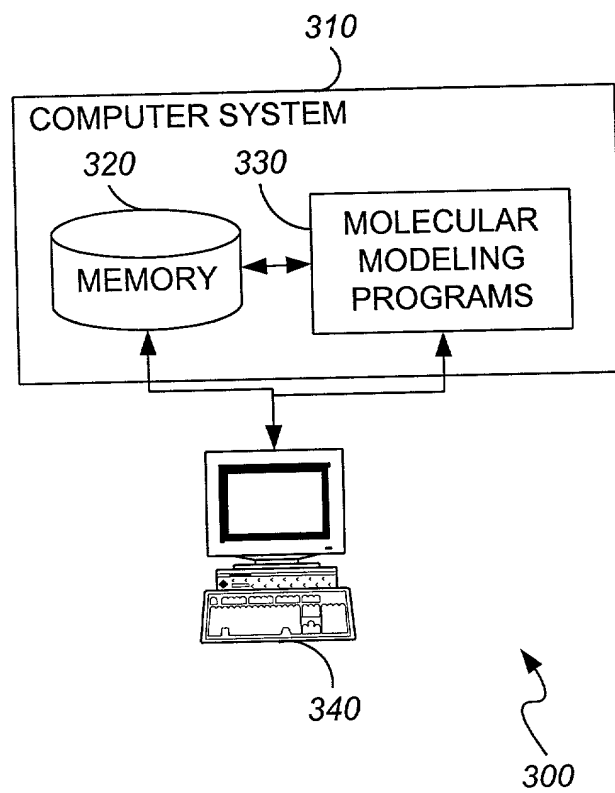


FIG. 3

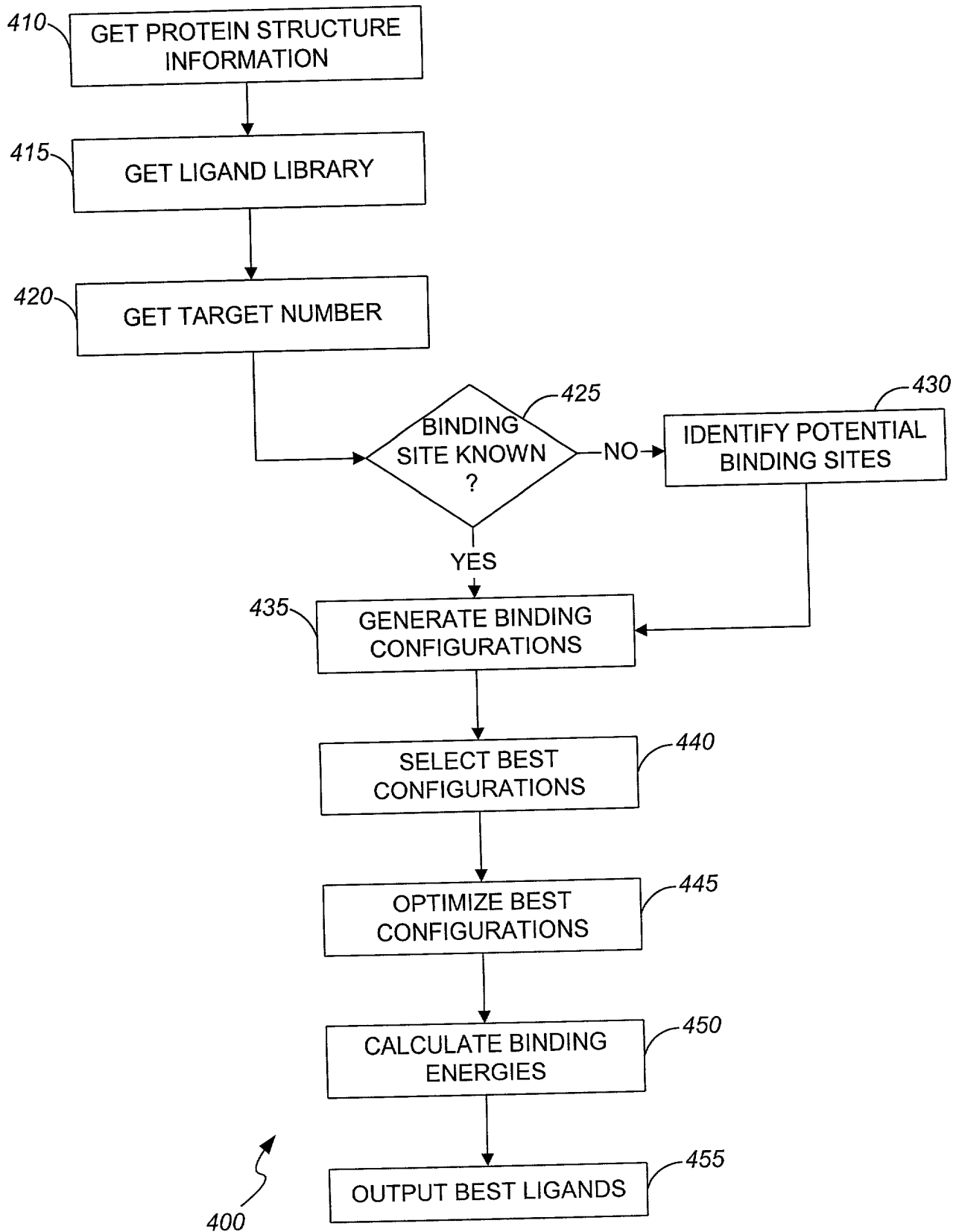
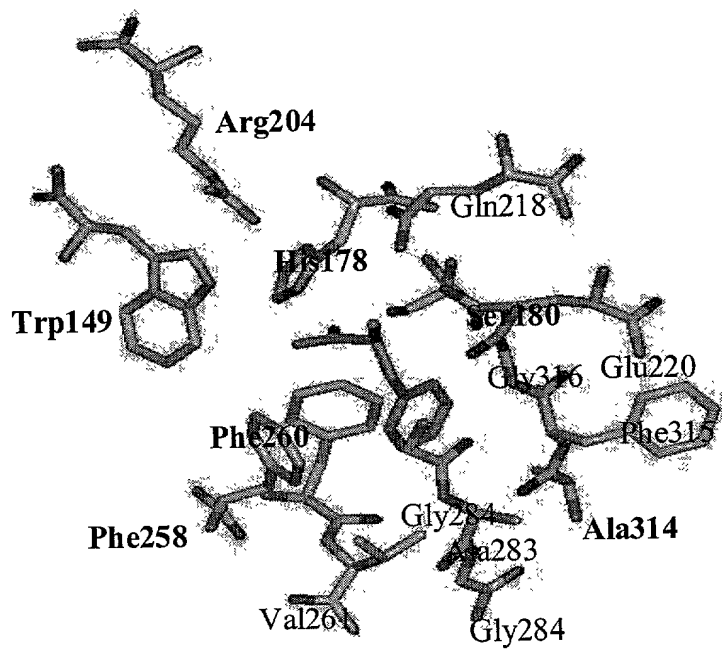
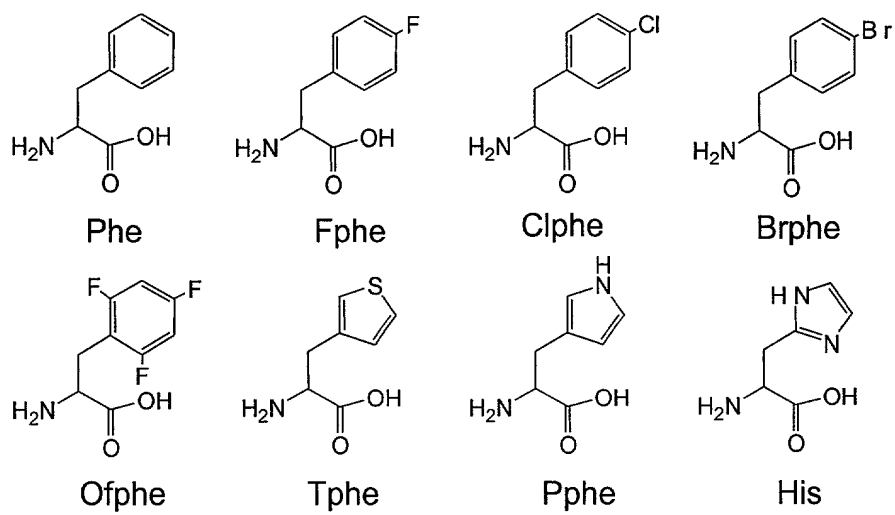


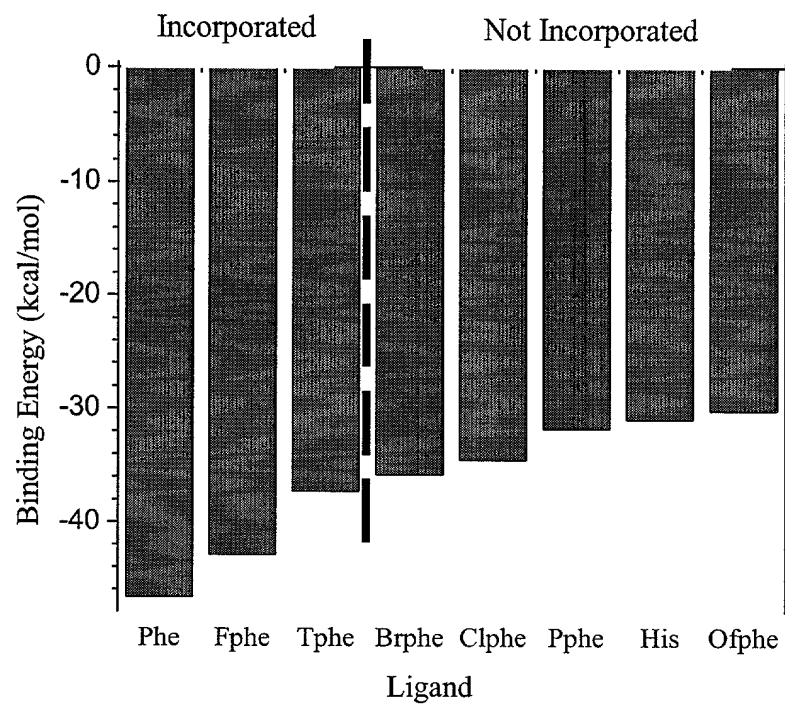
FIG. 4



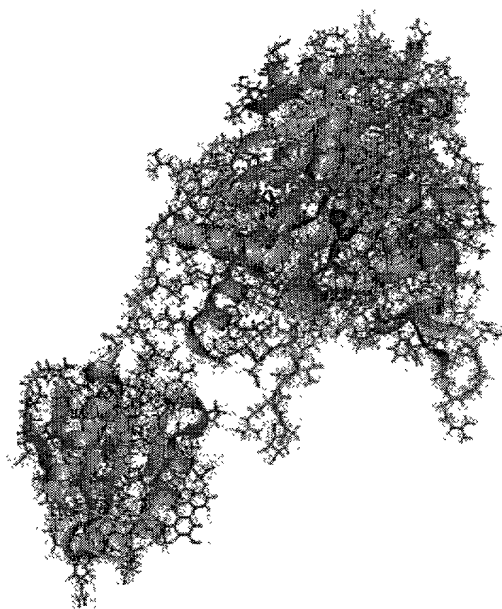
**FIG. 5**



**FIG. 6**



**FIG. 7**



*FIG. 8*



Binding energies of all 20 aa to hisRS

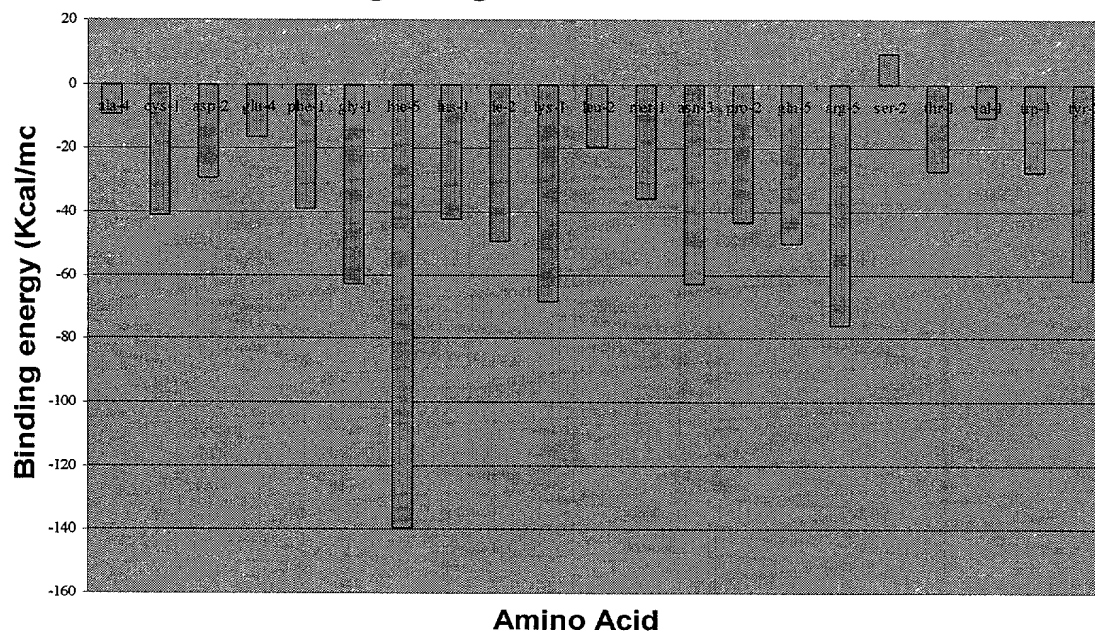


FIG. 9

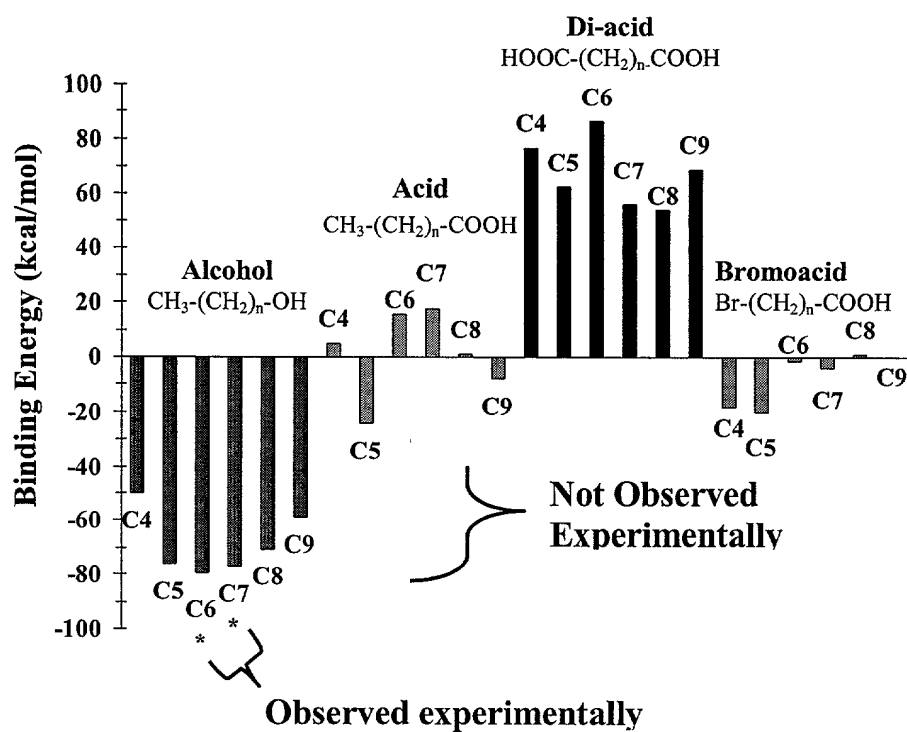


FIG. 10

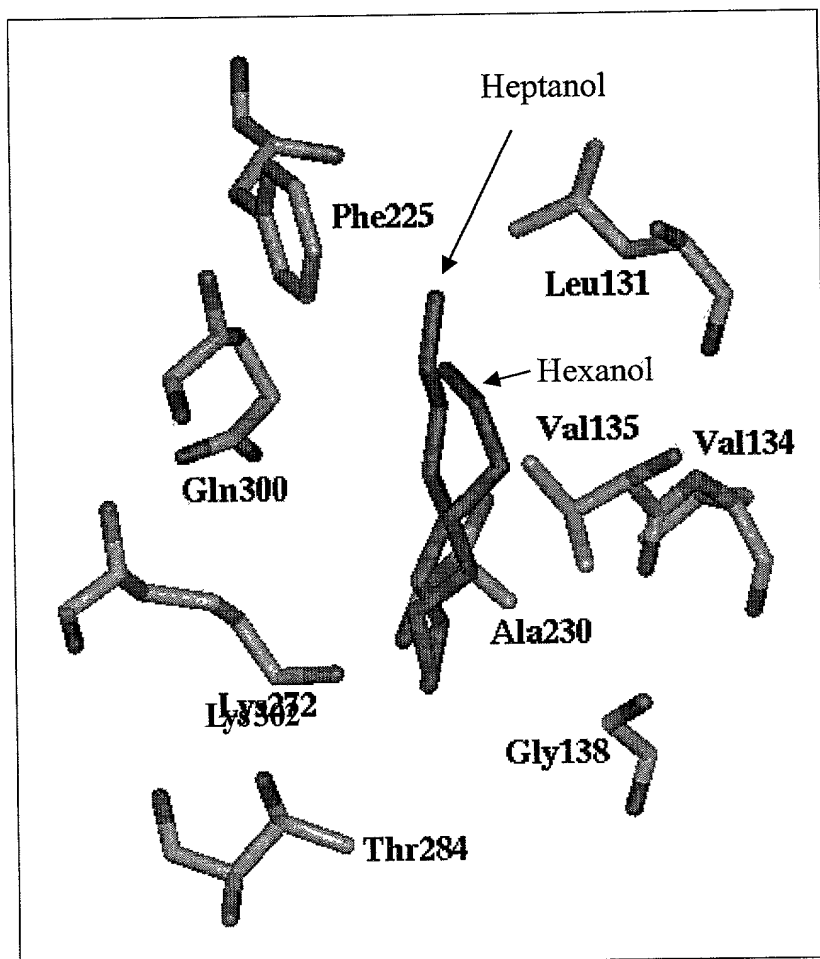
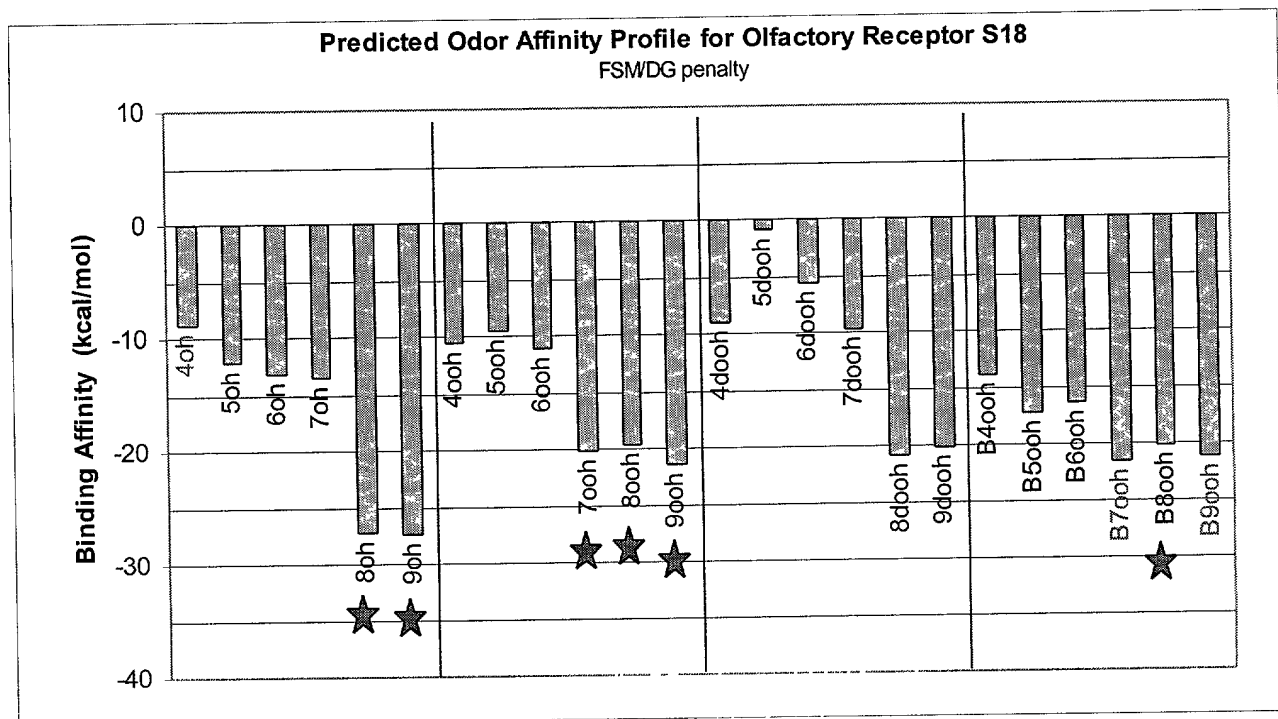
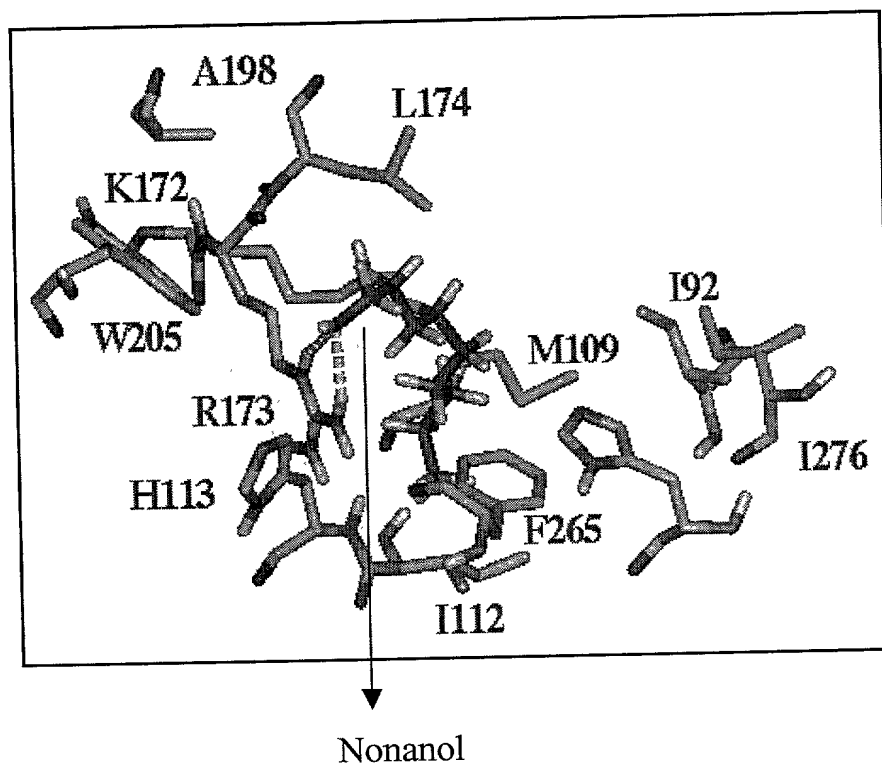


FIG. 11

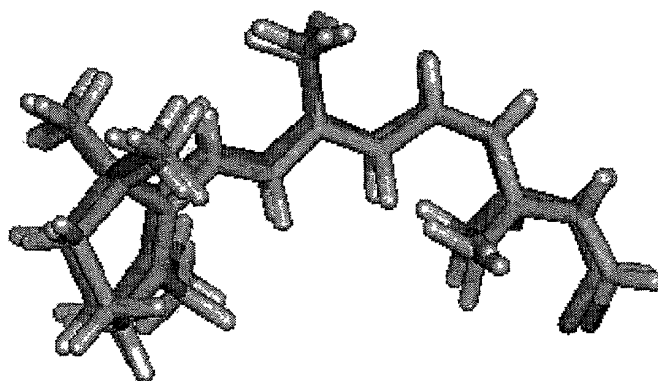


**FIG. 12**



*FIG. 13*

Docked cis-retinal (orange) X exp. Retinal (green)



*FIG. 14*